

ABSTRACT

A data detecting method and its apparatus for equalizing an input signal reproduced from magnetic recording media by partial response by employing at least one of partial response class 4 (PR4) and extended partial response class 4 (EPR4), and decoding the input signal. The input signal is equalized by PR4, and a first equalized signal is obtained. First decoded data is obtained from the first equalized signal. The input signal is equalized by EPR4, and a second equalized signal is obtained. Second decoded data is obtained from the second equalized signal. From the first equalized signal and second equalized signal, the signal condition of the input signal is judged, and the optimum data detecting method is discriminated. Thus, either the first decoded data or second decoded data is selected as detected data.